

CARE AND ADJUSTMENT
—OF—
ESTEY ORGANS

Directions.

ORGANS vs. FURNITURE.

There seems to exist in the minds of some people the impression that an Organ, unlike any other piece of furniture, is so constructed that the weather cannot affect it. If, perchance, it does not stand the test, but gives out in any part, the manufacturer is severely blamed, while really he is not in the least degree at fault.

In order that our Organs may render the purchaser the best possible service, we give below a few hints, based upon our experience of forty years in organ making.

POSITION AND CARE OF ORGANS.

Though it is one of the merits of the Estey

Organ that it is not easily affected by heat, cold or dampness, yet it is obviously desirable to avoid the extremes of DRY HEAT, as in a position near a stove or fire. In damp weather the room should be kept as dry as possible, and occasionally a fire built, even in warm weather of continued dampness, or a steamy atmosphere, all of which must affect all woods most unfavorably.

In Halls, Churches and Sunday-School Rooms the organ is best placed in front of the audience, on a platform slightly elevated.

In private houses the position will depend almost entirely upon the convenience of the owners

Dust should be excluded from the Instrument; more reeds are rendered silent by it than by anything else.

To do this the Stops should be closed when not in use, and the Keys covered.

INSTRUMENTS ARE FREQUENTLY INJURED

From being tampered with by persons who are unskilled in their mechanism, and yet are tempted by curiosity to take them apart "to see how they are made." Never allow meddling with the interior of an Organ, unless there is some real necessity for it, and this will rarely occur. In some instances an apparent defect

may appear, which, with a little explanation, any careful person can remedy in a few minutes.

Sometimes on touching a Key, no tone, or a false tone, is produced. This is most likely to occur when the instrument is first unpacked, having in transportation been turned over in all ways many times. It is almost always occasioned by some minute substance, which has caught in the reed, thus preventing its proper action. Of course the removal of this obstruction entirely remedies the difficulty, and this can be effected by any one in a few minutes. A slight rap on the heel of the reed which projects from the cell, will often free it without removing it from the reed board.

The rattling of reeds is frequently caused by the Organ having been exposed to dampness, causing the reed board to swell. By swelling, the partitions between the reed cells press too hard against the plate of the reed, causing the tongue to hit the plate when it vibrates. This can be obviated by drawing the reed out, and filing the outer edges of the reed *PLATE*, *not* the *tongue*.

The *back* sets of Reeds are reached by letting down the back of the case, and raising the swell box, drawing the Stop Knob, so as to show the particular set desired; the *front* sets of Reeds are reached by unscrewing and removing the

Key-slip (under the front end of Keys) and raising swell-box, etc., as on the back side.

HOW TO GET AT THE REEDS.

The implements needed are a common screw-driver and the little hook (called the reed-hook) which will be found secured on the inside of the Organ.

In Organs having only TWO SETS OF REEDS, the Diapason and Melodia reeds are in the front side of the Reed board, and the Flute, (or Vox Jubilante,) and Viola reeds in back.

In Organs having THREE SETS OF REEDS, the Diapason and Melodia are reached from the front side. The Flute, Viola, Vox Jubilante and Violetta reeds are all in back.

TO GET AT THE PEDAL-BASS REEDS.

To get at the PEDAL-BASS reeds, remove the pedals, open the swell, and by depressing the

tracker pin, the reeds can easily be drawn from the front side.

In Organs having our Patent Manual Sub-Bass, the reeds can be reached by unfastening the little brass hooks at each end of the Sub-Bass, taking off the box and opening the stop.

After getting access to the little cells in which the reeds are inserted (as explained hereafter), a hook is used to draw out the reed.

This done the reed can be taken up, and the obstruction, which will usually be found lodged between the tongue and the plate of the reed, can be removed. The best way to do this is by a slight blow on the reed plate.

Be careful, when about to draw the Reed from its cells, not to insert the reed hook so far as to catch the end of the tongue of the Reed.

RATTLING. CAUSES AND REMEDIES.

The *cause* is generally the contact of two pieces of metal, or metal and wood, one or both of which have become loose.

The *locality* is generally in the swells. Frequently on opening the knee-swell, the noise will cease, and in that case, the trouble is sure to be in the *swell*.

To *detect its locality*, strike the chord that produces the rattling; raise the cover and the name board, and continue the chord, placing

your fingers upon the swells directly under the BACK end of the key-board, first at one end and then at the other, also upon the sides which raise the stops, and if you do not find it there, or feel the vibration, you may know that it is probably in the FRONT swell.

To *get at the front swell*, take out the key-slip by removing a screw at each end; continue the tone which produced the rattle, at the same time putting your fingers upon the front swell in the same way as before. Should the rattling cease while your finger is upon it, you may know that it is in THAT swell. Look thoroughly to see if the screw is loose that holds the rod by which the swell is opened.

Rattles are SOMETIMES occasioned by a panel being loose in the back of the case, but not often. This can be easily remedied by driving a brad through the rail into the panel to tighten it.

Rattles are very often caused by a pin, needle, nutshell, or some hard substance, having been dropped into the Organ when opened, and allowed to remain on the action board,

Squeaking noises are usually caused by the hinges under the foot-pedals, or the webbing-rollers on the frame under the foundation board or the bearings of the Vox Humana fan, and only requires a few drops of oil to remedy.

SLUGGISH ACTION. HOW TO FIX THE ACTION.

When the instrument has been exposed to dampness, so that one or more keys stick, raise the name-board and take out the keys, which are held in their place by a thin strip of wood, resting against the back ends, and fastened with small screws. It will then be found, in nearly every case, that the small wooden pins, which stand under the keys and serve to open the valves underneath, are swelled and tightened. These may be taken out and rubbed down with fine sand paper, or a piece of polished steel or iron, and returned to their places, and the difficulty will disappear.

DROPPED KEYS.

When, by reason of a hard blow or other cause, a key drops and remains down, continuing to sound whenever the bellows is filled, it indicates that the valve is thrown out of place. The valve underneath plays between two brass pins, and once in a great while, some unusually severe blow on the keys will depress it so as to catch on the end of the brass pin at one side or the other. Frequently with a sharp pointed knitting needle inserted in the hole, it is possible to work the valve sidewise a little, and thus release it.

But if this is not successful, there is no way

to get at it except by taking up the Action entire.

To do this:

1. Let down the back of the case.
2. Swing the drop out on the back side, and raise the name-board, after disconnecting the wires at each end.

Before putting the name-board back in its place, be sure that every Stop-Knob is pushed in.

3. Remove the Key-slip in front, and also the blocks at each end of the key-board.

4. Remove the screws around the entire edge of the action board, and take the entire action up and *out* from back side. The valve can then be seen on the under side of the board, and replaced on the brass pin and covered with its wire spring.

CONTINUOUS SOUNDING.

In case the reeds in any particular set or stop continue to sound after the stop is shut, it may generally be remedied in the following manner:

1. Decide which set of reeds it is that sounds.
2. If in front, remove the key-slip just beneath the key-board; if in the back set, let down the back of case; raise the swell box and the stop or *mute* is in sight; this pine strip is lined with white leather and doubtless does not set down tight enough against the reed cells to close them. A slight blow with a hammer on the

little brass butts by which it is held, will generally stop any leakage of air. If this does not accomplish it, a very little trimming from the edge of the projecting leather may allow it to adhere more closely, and thus close the cells.

IN TWO MANUAL ORGANS,

A portion of the foundation board may be removed under the front of the key-board projection; by an examination underneath just over the Knee Swell, the line of screws holding it will be seen.

THE VOX HUMANA TREMOLO.

Sometimes the rotary fan will not revolve when the stop is drawn. This may arise from either of the following causes, viz.: 1. The wooden floats inside the box, rub against the side of the box. 2. The fan itself may strike. 3. The fan may possibly bind endwise.

In the first case, the side of the box can be removed and the floats trimmed. In the other cases, the cause will suggest the remedy. Generally a drop of oil on the bearings will remove all difficulty.

☞ Don't expect the Tremolo to affect any reeds in the front side. It is intended to affect the Diapason reeds principally.

A FEW HINTS TO PLAYERS.


Sit high enough to give a sufficient command of the key-board and pedals, and close enough to bring the KNEE SWELLS into full command. Place the feet firmly on the pedals, using them alternately, and *giving them the full motion*. A short, jerky motion of the pedals will produce jerky and uneven tones. In Single and Double Reed Organs, a slow, even motion will give the desired effect; in those having the Sub Bass, Harmonique or Octave Couplers, or additional Reeds, a strong, vigorous action of the pedals will be necessary to produce the FULL POWER of the Organ.

The KNEE SWELL is controlled by the right knee, so that a slight pressure of the knee, without inconvenience in position, will increase the tone, while a spring causes it to return, when it is desirable to diminish the tone; thus the most perfect CRESCENDO and DIMINUENDO can be obtained, more beautiful than the AUTOMATIC SWELL, or any other in the market. The ease with which it is managed, and the PERFECT CONTROL which the performer has over it, make it the best swell now in use.

The GRAND ORGAN SWELL is controlled by the left knee, and the full power of the Organ can be secured instantly by a quick pressure to the left. As soon as the pressure is removed, the

action returns to its original position, and the tone is the same as before.

Some of the largest Organs are furnished with a catch which holds the Knee Swell open until released. When such an Organ is received, this Catch will be fastened up behind the front rail by a button on the under side.

 In using the Grand Organ do not press it gradually, but quickly. Otherwise the Organ will seem to be out of tune.

USE OF STOPS.

There are no rigid rules for the combination and use of the various Stops. Every experienced organist will produce such effects as his taste, judgment, and familiarity may teach him. The following hints are offered merely as suggestions to those unaccustomed to the use of the Organ. These hints are limited to Estey Organs having two or three sets of reeds, as the larger instruments will naturally find their way into the hands of those whom it would be superfluous to instruct.

In general, then, for legato playing, the stops DIAPASON and MELODIA are the first to be drawn.

These are the foundation stops to which the others are added as more power is wanted. The next in importance are the stops FLUTE and

VIOLA. These add brilliancy as well as power. With these four stops drawn, the touch may be either staccato or legato according to the character of the music to be played. Then comes the VOX JUBILANTE, whose bright, cheerful tones are heard above all the others. This stop is of great service when it is desired to make the treble prominent. The VIOLETTA adds little to the power of instrument, but is mainly used for an accompaniment to a Solo stop, or to produce an Echo, as hereafter explained.

If a still softer effect is desired, as is very often the case, draw the DOLCE and DULCIANA stops alone. The DULCIANA is very fine as a solo stop with the VIOLETTA for accompaniment. In general, however, the DIAPASON is more desirable. In either case, the Organ is prepared for a soft, smooth solo, with corresponding accompaniment. Play solo in smooth legato style above Middle C, and accompaniment in full chords in the lower octaves of the instrument. Now add the FLUTE, and more lively music can be played with good effect. For bright and joyous effects, use VOX JUBILANTE with VIOLETTA accompaniment, as before. In using VOX JUBILANTE and FLUTE together, it will be found that the VIOLA will give a better accompaniment than the VIOLETTA. As an example of the foregoing, take some simple

Galop, play the first part with all stops drawn except the VOX HUMANA and FORTES; for the trio, use the VOX JUBILANTE alone, with VIOLETTA for accompaniment, returning to the Full Organ for the close. The VOX HUMANA adds much to variety of the instrument when judiciously used. It should be employed solely with the DIAPASON, used as a solo stop, but never with the Full Organ.

A fine Echo effect can be produced by drawing the DIAPASON and VIOLETTA, and play in full chords, with both hands above Middle C, with the swell open; then repeat the last four or more chords, with both hands *below* Middle C, and having the swell closed.

In instruments having the Grand Organ attachment, this effect can be better produced by drawing the VIOLETTA stop alone, and, after throwing open the Grand Organ, play in the same manner as indicated above, closing the Grand Organ and transferring the hands to the lower octaves of the instrument for the Echo.

In accompanying a solo voice, the DIAPASON and MELODIA are generally of sufficient power to give the proper sustaining effect, unless the room is very large, and the voice more than usually powerful; in that case, the FLUTE and VIOLA should be added. For a quartette or chorus, the DIAPASON, MELODIA, FLUTE and

VIOLA will usually be needed. The accompanist, however, should always bear in mind that the tone of the instrument is but the *background* of the voices and not the leader. In accompanying a solo voice, the constant effort should be to move with the voice in all its variations of expression and time, and not attempt to direct by a rigid adherence to the time of the written music. For quartette and chorus singing, a more strict regard for exact time is necessary; but the instrument should be entirely secondary in power to the voices, the accompanist remembering always that it is the voices that are to be heard, and that an accompaniment is not the work by which he ought to display either the power of his instrument, or his own proficiency as an organist. With these simple suggestions as a guide, learners will rapidly acquire such familiarity with the organ as will enable them to devise for themselves many other very desirable effects.